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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,132	05/24/2001	Thomas Juestel	PHDE 000084	1103
24737	7590	06/28/2004	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			HARPER, HOLLY R	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/864,132	JUESTEL ET AL.	
	Examiner	Art Unit	
	Holly R. Harper	2879	

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)     | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steeger et al. (USPN 4,599,536) in view of Opitz et al. (USPN 5,744,233).

In regard to claim 1, the Steeger reference discloses a low-pressure (Column 2, Lines 57-59) mercury gas (Column 3, Lines 66-68) discharge lamp comprising an inner bulb (Figure 6, Element 5), which forms a gas discharge vessel and the wall of which is made of a material which is transparent to electromagnetic radiation and is coated with a phosphor (Column 3, Line 66 – Column 4, Line 5), and comprising an outer bulb surrounding and spaced apart from the inner bulb (Figure 3, Element 10), the wall of which contains a phosphor coating (Column 3, Line 66 – Column 4, Line 5), and comprising means for generating and maintaining a low-pressure mercury gas discharge (Column 6, Lines 58-64). The Steeger reference discloses that the phosphor coating converts UV light into light radiation, but does not specify the particular phosphor used in the lamp. The Opitz reference teaches coating a discharge lamp (Column 1, Lines 7-11) with coated phosphors comprised of ZnS:Cu,Au,Al; ZnS:Ag; or CaS:Eu (Column 3, Lines 29-33), which are UV-A phosphors. The coated phosphors are protected against

Art Unit: 2879

chemical attack and are liquid and readily dispersible (Column 2, Lines 8-9). Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the specified coated phosphors, as taught by Opitz, on the outer bulb to create a homogenous, dense and continuous layer.

In regard to claim 2, the Steeger in view of Opitz reference discloses that the wall of the outer bulb comprises a coating containing the UV-A phosphor.

In regard to claim 4, the Opitz reference discloses that a possible phosphor is ZnS:Ag (Column 3, Lines 29-33).

In regard to claim 5, the Opitz reference discloses that a possible phosphor is ZnS:Cu,Au,Al (Column 3, Lines 29-33).

In regard to claims 6 and 7, the Steeger reference discloses that the inner bulb is tubular, bent, and coiled (Figure 5, Element 5).

In regard to claims 8 and 9, the Steeger in view of Opitz reference discloses the claimed invention except for the limitation of the outer envelope being pear-shaped. It has been held that a change in shape is generally recognized as being within the level of ordinary skill in the art. It would have been obvious to one having ordinary skill in the art to shape the outer bulb into a pear-shape, since such a modification would have involve a mere change in the shape of a component.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Steeger et al. (USPN 4,599,536) in view of Opitz et al. (USPN 5,744,233) in further view of Nishio et al. (USPN 6,437,502).

In regard to claim 3, the Steeger in view of Opitz references disclose a low-pressure mercury discharge lamp with phosphor coatings on the outer and inner bulbs.

Art Unit: 2879

The outer bulb has a UV-A phosphor. These references do not disclose that the other bulb is made of resin. However, it is noted that the inclusion of a resin outer bulb is not shown to solve any problems or yield any unexpected results that are not within the scope of Steeger in view of Opitz's lamp. Accordingly, the inclusion of a resin outer bulb is considered to be an obvious matter of design choice. For example, the Nishio reference discloses that the outer envelope of a discharge lamp can be made from either glass or resin.

#### ***Response to Arguments***

4. Applicant's arguments filed 5/5/04 have been fully considered but they are not persuasive.

Regarding applicant's claim that the combination of Steeger in view of Opitz references was created using hindsight, the examiner respectfully disagrees. The motivation to combine the references, as specified in claim 1, is applicable to all the phosphors listed by Opitz. Therefore, the use of that motivation to teach the use of ZnS:Cu,Au,Al; ZnS:Ag; or CaS:Eu in the lamp disclosed by Steeger is deemed proper. Absent any proof that there is improper motivation to combine the references or the combination is not operable, the rejection is deemed valid.

#### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2879

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Holly Harper whose telephone number is (571) 272-2453. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Holly Harper  
Patent Examiner  
Art Unit 2879

  
**ASHOK PATEL**  
**PRIMARY EXAMINER**